

AMENDMENTS TO THE CLAIMS

1. (Canceled)

2. (Canceled)

3. (Currently Amended) A voltage detection circuit ~~as claimed in claim 2,~~

comprising:

a first transistor and a second transistor that have emitters thereof connected together to form a differential pair;

a voltage division circuit that divides an input voltage into a first division voltage and a second division voltage, the voltage division circuit being connected directly to a base of the first transistor to apply the first division voltage to the base of the first transistor, the voltage division circuit being connected directly to a base of the second transistor to apply the second division voltage to the base of the second transistor; and

a first resistor that has one end thereof connected to the base of the second transistor and that has another end thereof connected to the emitter of the second transistor,

wherein whether the input voltage is equal to a predetermined level or not is checked based on an output from the differential pair,

wherein the first and second transistors are both of a PNP type,

wherein the voltage division circuit ~~includes~~ consists of:

a serial circuit composed of a rectifying element and a first ~~second~~ resistor;

a ~~second~~ third resistor; and

a third fourth resistor, and

wherein the input voltage is applied to one end of the serial circuit, another end of the serial circuit is connected to one end of the ~~second~~ third resistor, another end of the ~~second~~ third resistor is connected to one end of the ~~third~~ fourth resistor, another end of the ~~third~~ fourth resistor is connected to ground, the first division voltage is outputted from a node between the serial circuit and the ~~second~~ third resistor, and the second division voltage is outputted from a node between the ~~second~~ third resistor and the ~~third~~ fourth resistor.

4. (Previously Presented) A voltage detection circuit as claimed in claim 3, wherein, when the input voltage is equal to the predetermined voltage, a voltage across the rectifying element is equal to a base-emitter voltage of the second transistor.

5. (Currently Amended) A voltage detection circuit as claimed in claim 4, wherein the predetermined voltage is equal to a sum of a first multiplication product and a second multiplication product,

the first multiplication product being a product obtained by multiplying
a differential voltage between a base-emitter voltage of the first transistor and the base-emitter voltage of the second transistor as observed when the differential pair is in a state of equilibrium

by

a value obtained by dividing a sum of resistances of the ~~first, second, and third~~ second, third, and fourth resistors by the resistance of the ~~second~~ third resistor,

the second multiplication product being a product obtained by multiplying

the base-emitter voltage of the second transistor

by

a value obtained by dividing a sum of the resistance of the ~~third~~ fourth resistor and a resistance of the ~~fourth~~ first resistor by the resistance of the ~~fourth~~ first resistor.

6. (Currently Amended) A voltage detection circuit as claimed in claim ~~[[1]]~~ 3, further comprising:

an output transistor that is turned on and off according to an output from the differential pair,

wherein the voltage detection circuit outputs as a reset signal an output of the output transistor.

7. (Canceled)

8. (Canceled)

9. (Currently Amended) A semiconductor integrated circuit device ~~as claimed in claim 8~~, including a voltage detection circuit, the voltage detection circuit comprising:

a first transistor and a second transistor that have emitters thereof connected together to form a differential pair;

a voltage division circuit that divides an input voltage into a first division voltage and a second division voltage, the voltage division circuit being connected directly to a base of the first transistor to apply the first division voltage to the base of the first transistor, the voltage division circuit being connected directly to a base of the second transistor to apply the second division voltage to the base of the second transistor; and

a first resistor that has one end thereof connected to the base of the second transistor and that has another end thereof connected to the emitter of the second transistor.

wherein whether the input voltage is equal to a predetermined level or not is checked based on an output from the differential pair,

wherein the first and second transistors are both PNP-type transistors,

wherein the voltage division circuit ~~includes~~ consists of:

a serial circuit composed of a rectifying element and a ~~first~~ second resistor;

a ~~second~~ third resistor; and

a ~~third~~ fourth resistor, and

wherein the input voltage is applied to one end of the serial circuit, another end of the serial circuit is connected to one end of the ~~second~~ third resistor, another end of the ~~second~~ third resistor is connected to one end of the ~~third~~ fourth resistor, another end of the ~~third~~ fourth resistor is connected to ground, the first division voltage is outputted from a node between the serial circuit and the ~~second~~ third resistor, and the second division voltage is outputted from a node between the ~~second~~ third resistor and the ~~third~~ fourth resistor.

10. (Previously Presented) A semiconductor integrated circuit device as claimed in claim 9,

wherein, when the input voltage is equal to the predetermined voltage, a voltage across the rectifying element is equal to a base-emitter voltage of the second transistor.

11. (Currently Amended) A semiconductor integrated circuit device as claimed in claim 10,

wherein the predetermined voltage is equal to a sum of a first multiplication product and a second multiplication product,

the first multiplication product being a product obtained by multiplying
a differential voltage between a base-emitter voltage of the first transistor
and the base-emitter voltage of the second transistor as observed when the differential
pair is in a state of equilibrium
by
a value obtained by dividing a sum of resistances of the ~~first, second, and~~
~~third~~ second, third, and fourth resistors by the resistance of the ~~second~~ third resistor,
the second multiplication product being a product obtained by multiplying
the base-emitter voltage of the second transistor
by
a value obtained by dividing a sum of the resistance of the ~~third~~ fourth
resistor and a resistance of the ~~fourth~~ first resistor by the resistance of the ~~fourth~~ first
resistor.

12. (Currently Amended) A semiconductor integrated circuit device as claimed in
claim ~~[[7]]~~ 9, further comprising:

an output transistor that is turned on and off according to an output from the
differential pair,

wherein the semiconductor integrated circuit device outputs as a reset signal an
output of the output transistor.

13. (Currently Amended) A method for fabricating a semiconductor integrated
circuit device,

the semiconductor integrated circuit device including a voltage detection circuit,
the voltage detection circuit comprising:

a first transistor and a second transistor, both of a PNP type, that have emitters thereof connected together to form a differential pair;

a voltage division circuit ~~including~~ consisting of a serial circuit composed of a rectifying element and a ~~first~~ second resistor, a ~~second~~ third resistor, and a ~~third~~ fourth resistor, the voltage division circuit dividing an input voltage into a first division voltage and a second division voltage, the voltage division circuit being connected directly to a base of the first transistor to apply the first division voltage to the base of the first transistor, the voltage division circuit being connected directly to a base of the second transistor to apply the second division voltage to the base of the second transistor; and

a resistor that has one end thereof connected to the base of the second transistor and that has another end thereof connected to the emitter of the second transistor,

wherein whether the input voltage is equal to a predetermined level or not is checked based on an output from the differential pair, and

wherein the input voltage is applied to one end of the serial circuit, another end of the serial circuit is connected to one end of the ~~second~~ third resistor, another end of the ~~second~~ third resistor is connected to one end of the ~~third~~ fourth resistor, another end of the ~~third~~ fourth resistor is connected to ground, the first division voltage is outputted from a node between the serial circuit and the ~~second~~ third resistor, and the second division voltage is outputted from a node between the ~~second~~ third resistor and the ~~third~~ fourth resistor,

the method comprising a step of forming the resistor, the ~~first~~ second resistor, the ~~second~~ third resistor, and the ~~third~~ fourth resistor simultaneously by a same process.

14. (Original) A method for fabricating a semiconductor integrated circuit device as claimed in claim 13,

wherein the semiconductor integrated circuit device is so configured that, when the input voltage is equal to the predetermined voltage, a voltage across the rectifying element is equal to a base-emitter voltage of the second transistor.

15. (Currently Amended) A method for fabricating a semiconductor integrated circuit device as claimed in claim 14,

wherein the semiconductor integrated circuit device is so configured that the predetermined voltage is equal to a sum of a first multiplication product and a second multiplication product,

the first multiplication product being a product obtained by multiplying

a differential voltage between a base-emitter voltage of the first transistor and the base-emitter voltage of the second transistor as observed when the differential pair is in a state of equilibrium

by

a value obtained by dividing a sum of resistances of the ~~first, second, and third~~ second, third, and fourth resistors by the resistance of the ~~second~~ third resistor,

the second multiplication product being a product obtained by multiplying

the base-emitter voltage of the second transistor

by

a value obtained by dividing a sum of the resistance of the ~~third~~ fourth resistor and a resistance of the ~~fourth~~ first resistor by the resistance of the ~~fourth~~ first resistor.